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Subject: my favourite part....

Posted by [PakProtector](#) on Sun, 30 Oct 2005 20:50:56 GMT

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Hey-Hey!!!, You mention the 300B grid requiring a max of 0,5 mA. This is all very well and good. No issues with the math. The critical thing is to look at what delivering that current from a non-zero output Z would be. If we take a 5687, with its output Z of ~3k, that 0,5 ma is going to create a 1.5V drop across it. Not a large fraction indeed. Take a 6SN7 with an unbiased cathode R of 1k, and plate Z becomes  $R_p + (u+1)R_k$ . If we take  $R_p$  of 7k, and u to be 17, we are going to wind up with an output Z of 7k + 18k or 25kOhm...with 0,5 mA, this drops 12,5 V....a lot more than our 5687 example. cheers, Douglas

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